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| APPLICATION NO.             | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-----------------------|----------------------|---------------------|------------------|
| 10/825,590                  | 04/15/2004            | Reinhold Kammann     | SC 073              | 8175             |
| PMB 347                     | 7590 01/16/2007       |                      | EXAMINER            |                  |
| 16690 Champion Forest Drive |                       |                      | BOMAR, THOMAS S     |                  |
| Spring, TX 77379-7023       |                       |                      | ART UNIT            | PAPER NUMBER     |
|                             |                       |                      | 3672                | ,                |
|                             |                       | ·                    |                     |                  |
| SHORTENED STATUTO           | RY PERIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS                    |                       | 01/16/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.   | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|
|  | 10/825,590  | KAMMANN ET AL.   |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |
| ·  | Shane Bomar   | 3672   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | correspondence address   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was precised to reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |   | ·  |  |  |  |
| 1) Responsive to communication(s) filed on 23 O  | ctober 2006.  |  |  |  |  |
| ,=- ,  | action is non-final.  |  |  |  |  |
| ·=   | · · · · · · · · · · · · · · · · · · ·   |  |  |  |  |
| closed in accordance with the practice under E   | ·   |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>81-114</u> is/are pending in the application   | on.   | •  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>81-114</u> is/are rejected.  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.   |  |  |  |  |
| Application Papers   |   |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  | -  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correct   | ion is required if the drawing(s) is ob   | jected to. See 37 CFR 1.121(d).  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |
| 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:   | priority under 35 U.S.C. § 119(a  | )-(d) or (f).  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |
| application from the International Bureau  |   |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |
|  |   |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail D  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  Other:  |   |  |  |  |  |
|  |   |  |  |  |  |

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### DETAILED ACTION

## Claim Objections

1. Claim 108 is objected to because of the following informalities: the claim ends with a comma instead of the required period. Appropriate correction is required.

# Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 81-95, 106, and 108-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0133942 to Kenison et al in view of US 6,641,434 to Boyle et al.

Regarding claims 81-85, 90, 92, 94, 95, 106, 112, and 114, Kenison et al teach a body 506 with two spaced apart ends, such as pin and box ends, wherein a radio frequency identification (RFID) apparatus is disposed in a recess 508 of the pin end, the RFID further comprising an antenna 302 that encircles the end of the body and includes integrated circuit 304 (see Figs. 2L and 2X; paragraphs 0087-0092, 0111, and 0112). The RFID is held in the recess

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by protective material 314, wherein the recess can have multiple shapes, although all of the recesses are exposed to the interior of the tubular (see Figs. 2P-2V; it is also noted that the circumferential RFIDs embodied by Figs. 2L-2Y are interchangeable as seen in paragraphs 0087, 0093, and 0095). In describing the application of the RFID in a wellbore environment in paragraphs 0076-0080 and 0136-0150, a method for sensing the RFID is also disclosed; wherein the RFID is sensed by its numerical code, or indicia, and the tubular is inherently handled by a handling apparatus. However, it is not expressly taught that the recess is formed in and extends around the end surface of the body.

Boyle et al teach the embedment of sensitive elements in recesses within wellbore tubulars similar to that of Kenison et al. It is further taught that the recess 25 is formed in and extends around the end surface of the body 21, the recess comprising a bottom wall and two spaced-apart side walls extending from the bottom wall, the bottom wall and each of the two spaced-apart side walls defined by a portion of the body, the recess having an opening above the bottom wall between the two spaced-apart side walls, the opening located at the end surface of the body 21 (see Figs. 2-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Kenison et al and Boyle et al before him at the time the invention was made, to modify the recess 508 taught by Kenison et al to be within the end surface of the body as taught by Boyle et al, in order to obtain a protected recess. One would have been motivated to make such a combination because the RFID would be within a recess that is completely separated and protected from the harsh wellbore materials being transported through the tubular (see col. 6, lines 52-55 and col. 7, lines 59-61 of Boyle et al).

Regarding claims 86-89, 91, 93, and 113, the combination teaches that the member is a piece of drill pipe with an externally threaded pin end spaced-apart from an internally threaded box end, and the body is generally cylindrical and hollow with a flow channel therethrough from the pin end to the box end, the pin end having a pin end portion with the recess therearound (see Fig. 2 of Boyle et al).

Regarding claims 108-111, since the combination teaches the currently claimed apparatus, then the method for making the apparatus is inherently already known to exist.

5. Claims 96-105 and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenison et al in view of Boyle et al as applied to claims 95 and 106 above, and further in view of US 2002/0014966 to Strassner et al.

While the above combination teaches the method for sensing a wave energizable RFID of claims 95 and 106, the combination is silent to the actual handling equipment and controls needed to convey the tubular string into the borehole.

Strassner et al teach a method for sensing a wave energizable RFID similar to that of the combination. It is further taught that the method includes controlling the sensing, energizing, and handling apparatuses with a computer, wherein the method also includes identifying and analyzing the signals produced from the RFID (see paragraphs 0018, 0019, and 0036, as well as claim 12). It would have been obvious to one of ordinary skill in the art, having the teachings of the combination and Strassner et al before him at the time the invention was made, to modify the method taught by the combination to include the steps of controlling the equipment with the computer of Strassner et al, in order to obtain a method for a drilling operation that includes identifying drilling components and communicating that information remotely to the drilling

system (see paragraph 0002 of Strassner et al). One would have been motivated to make such a combination because the Applicant has admitted in paragraphs 67-75 of the current specification that Strassner et al's computer control of the identification system is notoriously known in the art.

Regarding claim 104, the combination applied to claim 94 also teaches that the identification code received from the RFID is then sent to the computer to determine the component's age, weakness, and previous usage (see paragraphs 0018-0019 and Fig. 1B of Strassner et al). Therefore, the computer is acting as an inspection system upon receipt of a secondary signal from the reader 102.

### Response to Arguments

6. Applicant's arguments with respect to the now cancelled independent claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday - Thursday from 6:00am to 2:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David J. Bagnell Supervisory Patent Examiner Art Unit 3672

tsb January 8, 2007

> Jennifer H. Gay Primary Examiner